

Case No. F3238(C)

4. (Amended) Extruder according to claim 20 wherein the screw comprises between 3 and 4 thread starts and the cooling liquid is ammonia.

5. (Twice amended) Extruder according to claim 20 with a screw LT/De ratio of between 2 and 10.

6. (Twice amended) Extruder according to claim 20 wherein the H/wc ratio is under 0.2.

7. (Amended) Extruder according to claim 20 wherein the extruder is a single screw extruder.

15. (Amended) Extruder according to claim 20 with a screw LT/De ratio of between 2 and 5.

16. (Amended) Extruder according to claim 21 wherein the H/wc ratio is over 0.1.

20. (New) Single screw comprising an extruding screw and a barrel, said extruding screw having a length (LT) in contact with the barrel, a pitch length (Sp) and a screw diameter (De), said single screw extruder comprising cooling means constituted by a cooling circuit wherein a cooling liquid is circulated, said extruding screw being characterised by between 2 and 6 thread starts and pitch angle defined as  $\text{Arctg}(Sp/Pi.De)$  of between 32 and 42 degrees.

21. (New) Single screw extruder comprising an extruding screw and a barrel, said extruding screw having a length (LT) in contact with the barrel, a pitch length (Sp) and a screw diameter (De), said single screw extruder comprising cooling means constituted by a cooling circuit wherein a cooling liquid is circulated, said extruding screw being

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characterised by a pitch angle defined as  $\text{Arctg}(\text{Sp}/\text{Pi.De})$  of between 32 and 42 degrees and a  $\text{LT}/\text{De}$  ratio of between 2 and 10.

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22. (New) A single screw extruder comprising an extruding screw and a barrel, said extruding screw having a length (LT) in contact with the barrel, a pitch length (Sp) and a screw diameter (De), said single screw extruder comprising a cooling circuit wherein a cooling liquid is circulated, said extruding screw having between 2 and 6 thread starts and pitch angle defined as  $\text{Arctg}(\text{Sp}/\text{Pi.De})$  of between 32 and 42 degrees.

23. (New) A single screw extruder comprising an extruding screw and a barrel, said extruding screw having a length (LT) in contact with the barrel, a pitch length (Sp) and a screw diameter (De), said single screw extruder comprising a cooling circuit wherein a cooling liquid is circulated, said extruding screw having a pitch angle defined as  $\text{Arctg}(\text{Sp}/\text{Pi.De})$  of between 32 and 42 degrees and a  $\text{LT}/\text{De}$  ratio of between 2 and 10.

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